IN THE CLAIMS:

Cancel claims 4 and 14-18.

Amend claims 1-3 and 5-13 as follows:

--1. (Amended) A receiver for recovering data for at least one of a plurality of users from radio signals generated by said plurality of users, said receiver comprising:

a plurality of data detectors each of the data detectors associated with one of a plurality of temporal displacements in a communications channel through which the radio signals passed, each of said data detectors to estimate a symbol for one of said plurality of users from the received radio signals;

a signal strength estimator to determine strengths of the radio signals; and

a receiver controller to assign the user codes and the temporal displacements to each of said plurality of data detector according to the strengths of the radio signals, the receiver controller assigning a user code for a first number of data detectors and a user code for a second user to a second number of data detectors, the first number of data detectors having different temporal displacements than the second number of data detectors.

2. (Amended) The receiver of claim 1, wherein said receiver controller assigns more of said data detectors to the first user, the first user having a weaker signal strength than the second user.

3. (Amended) The receiver of claim 1, wherein said receiver controller assigns more of said data detectors to the first user, the first user having a stronger signal strength than the second user.

5. (Amended) The receiver of claim 2, further comprising a combiner to combine the estimated symbols associated with the first user to form composite symbols.

6. (Amended) The receiver of claim 5, further comprising a data store to store the radio signals received within a pre-determined time window, wherein the stored radio signals are input to said data detectors from the data store under control of said receiver controller.

7. (Amended) The receiver of claim 3, wherein said data detector means comprise rake fingers, the user specific codes comprise spreading codes, and the radio signals from the plurality of users are generated in accordance with a code division multiple access process.

8. (Amended) The receiver of claim 6, wherein said signal strength estimator re-estimates the signal strength of the radio signals at the temporal displacements, and said receiver controller re-assigns the plurality of data detectors in accordance with the re-estimated strength of the radio signals.

9. (Amended) A method of recovering data for at least one of a plurality of users from radio signals generated by said plurality of users, said method comprising:

estimating data symbols with a plurality of data detector means, wherein said estimating comprises assigning each of the plurality of data detector means to one of a plurality of user specific codes and one of a plurality of temporal displacements in a communications channel through which the received signals passed;

determining strengths of the radio signals; and

re-assigning the plurality of user specific codes and the plurality of temporal displacements to each of the plurality of data detector means,

wherein the re-assignment assigns a user code for a first user for a first number of data detector means and a user code for a second user to a second number of data detector means, the first number of data detector means having different temporal displacements than the second number of data detectors.

10. (Amended) The method of claim 9, wherein re-assigning assigns more of the data detector means to the first user, the first user having a weaker signal strength than the second user.

11. (Amended) The method of claim 9, wherein re-assigning assigns more of the data detector means to the first user, the first user having a stronger signal strength than the second user.

12. (Amended) The method of claim 10, further comprises combining the estimated data symbols associated with the first user into a corresponding composite symbol.

13. (Amended) The method of claim 12, further comprising:

storing the received radio signals within a pre-determined time window; and

re-estimating the user data symbols for the re-assigned codes and temporal displacements from the stored radio signals.--

Add claims 19-27, as follows.

--19. The method of claim 13, further comprising:

re-estimating the signal strength of the received radio signal at the temporal displacements; and

re-assigning the plurality of data detector means in accordance with the relative strength of said received radio signals.

20. The method of claim 13, further comprising:

re-generating the received signals associated with the first user, said re-generating comprises combining the estimated user data symbol with one of the plurality of user specific codes according to a temporal displacement.

21. The method of claim 20, further comprising:

subtracting the re-generated signal from the received signal prior to re-estimating the user data symbol.

22. The method of claim 13, wherein the plurality of data detector means comprise rake fingers and the user specific codes comprising spreading codes.

23. The method of claim 22, wherein the radio signals are generated in accordance with a code division multiple access process.

24. The receiver of claim 6 further comprising:

a signal re-generator means coupled to said data detector means, said re-generator means to re-generate the radio signals associated with the first user by combining the estimated user data symbol with one of the plurality of user specific codes according to a temporal displacement.

25. The receiver of claim 24, wherein said data detector means further comprises:

subtracting means to subtract the regenerated signal from the radio signal prior to estimation of the user data symbols.

26. The receiver of claim 5, wherein said combiner means further comprises:

a joint detector means to cancel a detected data symbol from the composite symbol.

27. The receiver of claim 1, further comprising:

a single processor including said combiner means and said signal strength estimator means, wherein said receiver controller controls said single processor.--

REMARKS

Claims 1-3, 5-13 and 19-27 are pending in the application, with claims 1-3 and 5-13 having been amended, to attend to minor informalities. Claims 1 and 9 are the independent claims. Favorable consideration and early passage to issue are respectfully requested.

Attached please find a marked-up version of the changes made by the current amendments.